

REMARKS/ARGUMENTS

Applicants respectfully request reconsideration of the present application. No new matter has been added to the present application. Claims 1-28 were rejected in the Office Action. Claims 6 and 19 have been amended, no new claims have been added, and no claims have been canceled in this Amendment. Accordingly, claims 1-28 are pending herein. Claims 1-28 are believed to be in condition for allowance upon review and acceptance of these remarks. Favorable action is respectfully requested.

Applicants' representative thanks Examiners Timblin and Kindred for granting a telephonic interview on April 4, 2007. During the interview, the claim rejections in the Office Action dated February 22, 2007 were discussed. In particular, the Office Action appears to reject the claims as follows: (1) claims 1-5, 8-12, 16-19, 23-26, and 28 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,891,920 to Minyard et al. ("Minyard"); (2) claims 6, 7, 13, 14, 20, and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Minyard and U.S. Patent Application Publication No. 2005/0050552 by Fuller ("Fuller"); and (3) claims 15, 22, and 27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Minyard and U.S. Patent Application Publication No. 2002/0016718 by Rothschild et al. (Rothschild). Applicants' representative indicated that it was believed that based on dependencies, the claim rejections should have been represented as follows: (1) claims 1-5, 8-12, and 28 rejected under 35 U.S.C. § 102(e) in view of Minyard; (2) claims 6, 7, 13, and 14 rejected under 35 U.S.C. § 103(a) in view of Minyard and Fuller; and (3) claims 15-27 under 35 U.S.C. § 103(a) in view of Minyard, Fuller, and Rothschild. The Examiners agreed with this assessment and the present Amendment will address the claim rejections as such.

Applicants' representative further discussed differences between the claimed invention and the cited references. In particular, Applicants' representative indicated that, although the invention is defined by the claims, embodiments of the invention are generally directed to managing large studies (e.g., medical images) by distributing studies from a central server to reviewing stations in a manner that provides for immediate access to a subset of the studies without creating excessive network traffic and consuming excessive memory resources. Studies may be sorted into working sets and a subset of studies in a working set may be distributed to review stations. Accordingly, some studies in the working set are readily available for review at a review station. Additionally, because only a subset of the studies are initially transferred (as opposed to all studies), excessive network traffic is avoided and excessive memory resources are not consumed. When a user (e.g., a physician) begins reviewing studies in the working set at a review station, the system recognizes that the studies are being reviewed and begins distributing other studies in the working set to the reviewing station. None of the cited references are directed to this concern, nor do the references provide the rather elegant solution of the present invention. It is respectfully submitted that the claimed invention is patentable over the cited references as described in further detail below.

Amendments to the Claims

Claims 6 and 19 have been amended herein to correct minor typographical errors.

Rejections based on 35 U.S.C. § 102

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdeggal Brothers v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the . . .

claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 2 USPQ2d 1913, 1920 (Fed. Cir. 1989). Further, the elements must be arranged as required by the claim. *See in re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). *See also*, MPEP § 2131.

Claims 1-5, 8-12, and 28 have been rejected under 35 U.S.C. § 102(e) as being anticipated by US Patent No. 6,891,920 to Minyard et al. (“Minyard”). As Minyard fails to describe, either expressly or inherently, every limitation for each of claims 1-5, 8-12, and 28, Applicants respectfully traverse this rejection as hereinafter set forth.

Referring initially to independent claim 1, a computerized method is provided for managing large studies transferred from at least one acquisition device to a study process server in order to transfer the studies to at least one review station. The computerized method includes: sorting each received study into at least one appropriate working set; prior to distributing the received studies to at least one review station, selecting at least one subset of the received studies from at least one working set; and distributing the at least one selected subset of studies to at least one review station.

In contrast, Minyard discusses a mammographic imaging system and tools for processing mammographic images. *See, e.g., Minyard, Abstract.* Images may be processed by background processing that includes preprocessing and/or interim processing. *See id., Abstract, col. 3, lines 15-27.* Processing may include, for example, ordering the sequence of images for a review session, annotating images, and optimizing image information for a particular display. *See, id., col. 3, line 16 through col. 4, line 57.* Additionally, the system allows physicians to manually tag images for later review. *See, id., col. 4, lines 29-57.*

It is respectfully submitted that Minyard is not concerned with distributing studies from a server to reviewing stations in a manner that provides for immediate access to a subset of

the studies without creating excessive network traffic and consuming excessive memory resources. As such, Minyard fails to describe, either expressly or inherently, every limitation of independent claim 1. In particular, Minyard fails to describe “prior to distributing the received studies to at least one review station, selecting at least one subset of the received studies from at least one working set” and subsequently “distributing the at least one selected subset of studies to at least one review station.” Minyard discusses background processing that may be performed for images. However, none of the background processing described in Minyard relates to selecting a subset of studies from a working set prior to distributing the studies to a review station, and then distributing the selected subset of studies to a review station.

Page 6 of the Office Action indicates that in Minyard, “a physician tags (i.e., selects) a subset of images from a large number of images for later review (col. 4 line 50-58). Minyard’s description of tagging a subset of images is the same as selecting the presently claimed selecting at least one subset that forms a working set (e.g., for later review).” Applicants respectfully disagree with this conclusion. In particular, to allow a physician to tag images in Minyard, all images first have to be transmitted to a review station to allow the physician to review and tag images for later review. As such, a subset of studies is not selected prior to distributing the studies to a review station as required by claim 1. Instead, in Minyard, the images are tagged by a physician after the images have been distributed.

It is respectfully submitted that Minyard fails to describe, either expressly or inherently, each and every element of independent claim 1, and, as such, claim 1 is not anticipated by the Minyard. Accordingly, Applicants respectfully request withdrawal of the rejection of claim 1 under 35 U.S.C. § 102(e). Claim 1 is believed to be in condition for allowance and such favorable action is respectfully requested.

Independent claims 8 and 28, include limitations similar to independent claim 1 that are not described, either expressly or inherently, by Minyard. As such, Applicants submit that independent claims 8 and 28 are not anticipated by Minyard for at least the reasons stated above with respect to independent claim 1. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 8 and 28 under 35 U.S.C. § 102(e). Claims 8 and 28 are believed to be in condition for allowance and such favorable action is respectfully requested.

Each of claims 2-5 depends from independent claim 1 and each of claims 9-12 depend from claim 8. Accordingly, these claims are believed to be in condition for allowance for at least the above-cited reasons. As such, Applicants respectfully request withdrawal of the 35 U.S.C. § 102(e) rejections of these claims as well.

Rejections based on 35 U.S.C. § 103

A. **Applicable Authority**

The basic requirements of a *prima facie* case of obviousness are summarized in MPEP § 2143 through § 2143.04. In order “[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success [in combining the references]. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).” See MPEP § 2143. Further, in establishing a *prima facie* case of obviousness, the initial burden is placed on the Examiner. “To support the conclusion that the

claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 USPQ 972, 972, (Bd. Pat App. & Inter. 1985).” *Id.* See also MPEP § 706.02(j) and § 2142.

B. Rejections based on Minyard and Fuller

Claims 6, 7, 13, and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Minyard and Fuller. Applicants respectfully traverse this rejection, as hereinafter set forth.

Initially, Applicants respectfully submit that Minyard and Fuller fail to teach or suggest each limitation of claims 6, 7, 13, and 14. Claims 6 and 7 depend from independent claim 1 and claims 13 and 14 depend from independent claim 8. The Office Action appears to rely on Minyard for teaching or suggesting the limitations of the base claims 1 and 8. However, Minyard fails to teach or suggest all limitations from the base claims as described hereinabove. The addition of Fuller fails to correct these deficiencies. Additionally, Fuller fails to teach or suggest the limitations for which it was cited. In particular, Fuller is directed to delivering data from a device driver to an application with a computer in a way that optimizes processing, which is wholly inapplicable to managing large studies between a central server and review stations (e.g., in a hospital). This disclosure in Fuller simply fails to teach or suggest the limitations of claims 6, 7, 13, and 14.

Additionally, Fuller is non-analogous art and thus not properly combinable with Minyard. “In order to rely on a reference as a basis for rejection of an applicant’s invention, the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably

pertinent to the particular problem with which the inventor was concerned.” *In re Oetiker*, 977 F.2d 1443, 1146, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). As indicated above, Fuller is directed to delivering data from a device driver to an application within a computer in a way that optimizes processing. Clearly, Fuller is not in the field of Applicants’ endeavor. Moreover, Applicants were concerned with distributing studies from a central server to review stations in a manner that prevents creating excessive network traffic and consuming excessive memory resources, not with optimizing the performance of an application operating on a computer. Since Fuller is neither in the field of Applicants’ endeavor nor reasonably pertinent to the particular problem with which Applicants were concerned, it cannot be relied on as a basis for rejecting claims 6, 7, 13, and 14.

Even if Fuller were analogous art, there is no suggestion or motivation to combine its teaching with the teaching of Minyard. MPEP § 706.02(j) states that in order to establish a *prima facie* case of obviousness under § 103:

there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. ... The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on the applicant’s disclosure.

MPEP § 2142 states that “[w]hen the motivation to combine the teachings of the references is not immediately apparent, it is the duty of the examiner to explain why the combination of the teachings is proper.” The examiner is required to present actual evidence and make particular findings related to the motivation to combine the teachings of the references. *See In re Kotzab*, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000); *In re Dembicza*k, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Broad conclusory statements regarding the teaching of multiple

references, standing alone, are not “evidence.” *Dembiczak*, 50 USPQ2d at 1617. “The factual inquiry whether to combine the references must be thorough and searching.” *In re Lee*, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002) (citing *McGinley v. Franklin Sports, Inc.*, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001)). The factual inquiry must be based on objective evidence of record, and cannot be based on subjective belief and unknown authority. *See id.* at 1433-34. The examiner must explain the reasons that one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious. *See in re Rouffet*, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998).

The Office Action has not presented any evidence why someone of ordinary skill in the art would have combined Minyard and Fuller. The sole rationale provided in the Office Action to combine Minyard and Fuller is that “[i]t would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Fuller’s system would have provided Minyard’s invention with [sic] enhancing the likelihood that the requested data are available for immediate delivery.” Office Action, p. 4-5. The Office Action cannot rely on the benefit of the combination without first supporting the motivation to make the combination. Such motivation does not appear anywhere in either of the references, and the Office Action has not presented any actual evidence in support of the same. Instead, the Office Action relies on broad conclusory statements. Such a basis does not adequately support the combination of references. Neither Minyard nor Fuller discloses or suggests a motivation to combine with the other to achieve the claimed invention. The references themselves do not suggest the viability of making the combination, and someone of ordinary skill in the art would not think to combine them. Thus, the references are not properly combined. Therefore, the combination is improper and must be withdrawn.

Moreover, as indicated above, even if the references were combined, the combination of Minyard and Fuller fails to teach or suggest all limitations of claims 6, 7, 13, and 14. For instance, claim 6 requires “monitoring each review station for selected user activities and populating each monitored review station with studies from one or more relevant working sets upon detecting one of the selected user activities.” Nothing in either Minyard or Fuller teaches or suggests monitoring a review station for user activities and populating a review station upon detecting a user activity.

For at least the above-cited reasons, Applicants submit that claims 6, 7, 13, and 14 are non-obvious over Minyard and Fuller. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 6, 7, 13, and 14 under 35 U.S.C. § 103(a). Claims 6, 7, 13, and 14 are believed to be in condition for allowance and such favorable action is respectfully requested.

C. Rejections based on Minyard, Fuller, and Rothschild

Claims 15-27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Minyard, Fuller, and Rothschild. Applicants respectfully traverse this rejection, as hereinafter set forth.

Referring initially to independent claim 15, a computerized method is recited for managing studies transferred from at least one acquisition device to a study process server in order to transfer the studies to at least one review station. The method includes transferring a selected subset of the existing studies from the study process server to at least one review station; monitoring the at least one review station for a login; and populating the at least one review station with studies from at least one relevant working set upon detecting the login.

Applicants initially submit that Minyard, Fuller, and Rothschild, either alone or in combination, fail to teach or suggest all limitations of independent claim 15. In particular, the references fail to teach or suggest populating a review station (that has been pre-populated with a selected subset of studies) with studies from a working set upon detecting a login. As indicated above, Minyard discusses physician tagging that occurs after all images have been transmitted for a physician to review and tag. As such, Minyard simply fails to teach or suggest transferring a subset of studies to a review station and then populating the review station with additional studies upon detecting a login. Additionally, as indicated above, Fuller is completely unrelated art and, as such, fails to teach or suggest the limitations of claim 15. Further, Rothschild discusses a system that either pushes images to a remote location as they are received or waits for a triggering event to push images to the remote location and not a combination of both. In contrast, the invention of claim 15 is directed to first distributing a subset of studies and then distributing additional studies upon detecting a login. Nothing in Minyard, Fuller, or Rothschild teaches or suggests this approach.

Additionally, as noted above, Fuller is non-analogous art and thus not properly combinable with Minyard or Rothschild. Moreover, there is no suggestion or motivation to combine the references. The Office Action has not presented any evidence why someone of ordinary skill in the art would have combined Minyard, Fuller, and Rothschild. The sole rationale provided in the Office Action to combine Minyard, Fuller, and Rothschild is that “[i]t would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Rothschild would have allowed Minyard/Fuller’s invention to detect a log in.” Office Action, p. 5. The Office Action cannot rely on the benefit of the combination without first supporting the motivation to

make the combination. Such motivation does not appear anywhere in either of the references, and the Office Action has not presented any actual evidence in support of the same. Instead, the Office Action relies on broad conclusory statements. Such a basis does not adequately support the combination of references. Minyard, Fuller, and Rothschild simply fail to disclose or suggest a motivation to combine with each other to achieve the claimed invention. The references themselves do not suggest the viability of making the combination, and someone of ordinary skill in the art would not think to combine them. Thus, the references are not properly combined. Therefore, the combination is improper and must be withdrawn.

For at least the above-cited reasons, Applicants submit that claim 15 is non-obvious over Minyard, Fuller, and Rothschild. Independent claim 22 contains limitations similar to claim 15 and is non-obvious for the above-cited reasons set forth for claim 15. Further, because claims 16-21 depend from claim 15 and claims 23-27 depend from claim 22, these claims are similarly non-obvious over the cited references. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 15-27 under 35 U.S.C. § 103(a). Claims 15-27 are believed to be in condition for allowance and such favorable action is respectfully requested.

CONCLUSION

For the reasons stated above, claims 1-28 are now in condition for allowance. Applicants respectfully request withdrawal of the pending rejections and allowance of claims 1-28. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned by telephone prior to issuing a subsequent action. It is believed that no fee is due in conjunction with the present amendment. If this belief is in error, the Commissioner is hereby authorized to charge any amount required to Deposit Account No. 19-2112.

Respectfully submitted,

/John S. Golian/

John S. Golian
Reg. No. 54,702

SHOOK, HARDY & BACON L.L.P.
2555 Grand Blvd.
Kansas City, MO 64108-2613
816-474-6550